

REMARKS

Claims 1-35 are pending with claims 1, 21, 30, 33 and 34 being the independent claims. Claim 21 has been amended for clarity and to emphasize that there are

- spectral properties class(es) assigned to each media entity that are not assigned as a result of DSP processing; and
- spectral properties characteristic(s) that are extracted as a result of DSP processing.

No new matter was added.

Claims 1-13, 15 and 17-20

Regarding the outstanding rejection to claim 17 under 35 U.S.C. § 112, Applicants respectfully submit that the term “principal component analysis” is a well understood term of art. For instance, Lindsay I. Smith’s “A tutorial on Principal Components Analysis,” (2002), located here http://www.cs.otago.ac.nz/cosc453/student_tutorials/principal_components.pdf, demonstrates that the term has sufficient meaning to those of ordinary skill in the art to satisfy the statutory requirements. Reconsideration and withdrawal of the rejection to claim 17 is thus respectfully requested.

In the Official Action, dated October 19, 2005, claims 1-13, 15, and 17-20 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 5,918,223 (Blum) in view of U.S. Patent No. 4,603,386 (Kjaer).

Without conceding the propriety of the combination of Blum and Kjaer, Applicants respectfully submit that even if Kjaer disclosed an entropy calculation process to form second output data, as recited in claim 1, no case is made that Blum and Kjaer together teach or

suggest the step of “inputting said *first, second and third output data to an averaging process* to form a spectral feature vector representing the input audio data.” Col. 6, lines 32-35 and lines 45-48 of Blum, for instance, cannot be said to teach or suggest this step because it is admitted that Blum does not teach or suggest the formation of the claimed second output data.

Withdrawal of the rejection to claim 1 based on Blum and Kjaer is thus respectfully requested. Claims 2-13, 15 and 17-20 depend from claim 1 and are believed allowable for the same reasons.

Accordingly, Applicants respectfully submit that a prima facie case of obviousness has not been made since not all claimed limitations are taught or suggested by the combination. Reconsideration and withdrawal of the rejections to claims 1-13, 15 and 17-20 under 35 U.S.C. § 103(a) is thus earnestly requested.

Claims 21-30

In the Official Action, claims 21-25, 27 and 29 were rejected under 35 U.S.C. § 102 as allegedly anticipated by Blum.

The Blum reference is understood by Applicants in great detail, and Blum is understood to disclose *only* digital signal processing (DSP) techniques. Thus, Blum cannot be said to teach or suggest generating a plurality of spectral properties vectors for media entities, wherein each spectral properties vector includes said at least one spectral properties class (not assigned by DSP) and at least one spectral properties characteristic based on digital signal processing, as recited in amended claim 21. It is the marriage of (A) acoustical, or perceptual, analysis and (B) DSP processing that is at the heart of Applicants' invention, as claimed.

Blum discloses only DSP processing. Withdrawal of the rejection to claim 21, as amended, is thus respectfully requested.

Claims 22-29 depend from claim 21 and are believed allowable for the same reasons.

Claims 30-33

In the Official Action, claims 30-33 were rejected under 35 U.S.C. § 103 as allegedly unpatentable over U.S. Patent No. 6,539,395 (Gjerdingen).

Having withdrawn the rejection based on Gjerdingen's possible anticipation, the Official Action now states that the invention of claims 30-33 is obvious over Gjerdingen. However, Applicants respectfully submit that the present invention, as recited in claims 30 and 33, requires a classification chain data structure, wherein each vector of the chain includes data representative of:

- spectral properties class(es) as classified by humans; and
- spectral properties characteristics as determined by digital signal processing.

Gjerdingen, in contrast is understood to disclose two different and distinct embodiments. In the first passage relied upon in the Official Action, it states:

An ensemble vector, wherein the ensemble vector depends upon an experts listener's response to question regarding a music sample indicating whether the music sample includes a female solo, male solo, female duet, male duet, mixed duet, female group, male group or instrumental. Col. 3, lines 50-54

However, this portion of Gjerdingen is understood by Applicants merely to disclose an embodiment in which an ensemble vector includes *only perceptual data* in the vector, i.e., human classifications, thereby expressly teaching away from combining such classification with any DSP techniques. Then, the Official Action refers to the following passage:

Data may be collected as DSP data 403B using DSP techniques. DSP techniques includes analyzing digitized audio files containing music into a set

of feature vectors which can be used to characterize and compare music. This, an audio file for any music is transformed into a set of number (feature vectors) which describes the qualities of the music. These numbers are constructed so that they represent the important or relevant features. Col. 9, lines 32-39

However, this portion of Gjerdingen is understood by Applicants to disclose and embodiment of a feature vector having *only DSP data* inside a feature vector, thereby expressly teaching away combining such “DSP only” technique with any other techniques.

As is a well known proposition, “[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.” MPEP 2143.01.

The Official Action attempts to ignore the obvious – that nowhere within Gjerdingen is any teaching or suggestion to combine the unrelated parts of the disclosure relied upon. Thus, nowhere can Gjerdingen be said to teach or suggest an embodiment of a feature vector including both perceptual qualities and DSP analysis, as recited in claims 30 and 33. Withdrawal of the rejection to claims 30 and 33 is thus respectfully requested. Claims 31-32 depend from claim 30 and are believed allowable for the same reasons.

Claim 34

In the Official Action, with respect to claim 34, the Official Action states in blanket fashion “regarding claim 34, see the preceding argument with respect to claims 1, 17, 30 and 31. The combination of Blum and Gjerdingen teach these features of classifying data.”

Since, as described above, nowhere can Blum and/or Gjerdingen be said to teach or suggest Applicants’ invention, as recited in claims 1, 21, 30 and 33, Applicants respectfully

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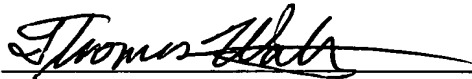
submit that Blum and Gjerdingen, whether taken alone or in combination, fails to teach or suggest the construction phase and classification phase as a whole, in the manner recited by claim 34.

Moreover, upon careful review of claim 34, Applicants respectfully submit that claim 34 substantially differs in scope from any of the preceding independent claims, and that no *prima facie* case of obviousness has therefore been made with respect to this *independent* claim. An independent review and analysis of claim 34 is thus appropriate, and reconsideration and withdrawal of the rejection to claim 34 is respectfully requested. Claim 35 depends from claim 34 and is believed allowable for the same reasons.

CONCLUSION

Accordingly, Applicants believe that the present Amendment is responsive to each of the points raised by the Examiner in the Office Action, and submit that Claims 1-35 of the application are in condition for allowance. Favorable consideration and passage to issue of the application at the Examiner's earliest convenience is earnestly solicited.

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